

ABSTRACT OF THE DISCLOSURE

Solder connections are created between the substrate of an electronic package and a circuit board having lengths that are longer than the width. The solder connections are created by locating solder balls of power or ground connections close enough to one another so that, upon reflow to the circuit board the solder balls combine, creating a larger solder connection. Signal solder balls, however, remain separated. The power or ground solder balls on a particular bond pad are separated from one another by portions of a removable solder mask that keep the solder balls spherical in shape during solder ball attachment to the electronic package. However, it is removed prior to reflow to the circuit board, thus creating a larger, longer solder connection between the electronic package and circuit board.